SECTION 100.0 GENERAL

The Commonwealth of Virginia Construction and Professional Services Manual – 2004 is written for those who have a basic knowledge and understanding of the building design and construction process and its terminology. State policies, standards and procedures for procurement of services, procurement of construction and contract management and administration differ from those used in the private sector and those used by agencies of the Federal Government. The policies stated herein are those of the Commonwealth of Virginia and are to be used by state agencies for construction on property owned by the Commonwealth subject to any delegations and/or authorizations which may be in effect for a particular agency.

The Commonwealth of Virginia Construction and Professional Services Manual - 2004 (hereafter referred to as the Manual) consists of 17 Chapters and Appendices A through Z and contains policies, procedures and guidance that state agencies must follow in the planning, design, and execution of both capital outlay and non-capital outlay projects.

The Construction and Professional Services Manual - 2004 for Architects and Engineers (hereafter referred to as the A/E Manual) consists of the first 10 Chapters of the Manual and Appendices A through Z. The A/E Manual and all revisions thereto, shall be incorporated into the "Contract Between the Owner and the Architect/Engineer" in their entirety, except as amended or superseded in the Contract or an addendum thereto. Architects and Engineers must follow these policies, procedures and guidance stipulated in Chapters 1 through 10 in providing services to state agencies in the planning, design, and execution of both capital outlay and non-capital outlay projects unless otherwise exempt in writing by the Contract or its MOU.

SECTION 101.0 MANUAL DESCRIPTION

The contents of the **Manual** are directive in nature. Deviations from the policy and procedures outlined within shall be requested by the agency and must have prior approval of the Director of the Division of Engineering and Buildings, Department of General Services or his Designee.

- 101.1 The Manual is designed to present the project acquisition process from advertisement for A/E services to project completion (occupied building). The Manual is arranged in a sequence that parallels this project acquisition process. The 2004 Edition of the Manual including errata corrections will be posted on the BCOM Website and may be downloaded and printed by the users. DEB Directives concerning construction and professional services and DEB Directives concerning the 'application' of the USBC to buildings on state property will be posted on the BCOM Website when issued.
- 101.2 Revisions to the Manual will be issued electronically by posting on the DGS / DEB / BCOM Website. Changes or revisions will be marked or identified in the Manual where they occur. The revision package will contain a summary sheet generally describing the changes or revisions made and the summary sheet will describe the marking or identification used with

that revision. The summary sheet will be numbered and dated. The summary sheet will become a permanent part of the **Manual** and is to be placed after the Table of Contents and before this chapter and before any previous summary sheet. Paper copies of the Revisions will not be issued.

101.3 The Bureau of Capital Outlay Management is responsible for maintenance of the **Manual** and the **A/E Manual**. Suggestions for changes or clarifications, questions, and requests for printed copies should be addressed to:

Bureau of Capital Outlay Management Division of Engineering and Buildings 805 E. Broad Street, 8th Floor Richmond, Virginia 23219

Or preferably e-mailed to: manuals@dgs.state.va.us

When submitting requests for printed copies, please download and use the "CPSM Order Form" posted on the BCOM webpage (URL is http://bcom.dgs.virginia.gov). When submitting suggestions for changes, please download and use the "CPSM Comment Form" posted on the BCOM webpage.

101.4 Italics: The material that appears in italics in Chapters 1 through 10 of the Manual are instructions and/or guidance to the Agency and are not part of the Contract between the Owner and the A/E. Chapters 11, 12, 13, 14, 15, 16 and 17 contain instructions and guidance to the Agency. These Chapters are not part of the the Contract between the Owner and the A/E. They appear in standard type rather than italics for ease of reading. Appendices A through Z are a part of both the Manual and the A/E Manual and shall be used by the A/E for their intended purposes in providing the services required by the Contract between the Owner and the A/E.

SECTION 102.0 MANUAL ORGANIZATION

The **Manual** is organized as follows:

- Chapter 1 provides an introduction to and overview of the **Manual** and establishes the design and life cycle cost philosophy of the Commonwealth for its Capital Outlay Program.
- Chapter 2 acquaints users of the Manual with the Capital Outlay, contractual and procurement terminology used in the Manual and its forms.
- 102.3 Chapter 3 contains the general terms and conditions for professional services contracts.

- 102.4 Chapter 4 describes the procedures used by agencies for procuring professional services.
- 102.5 Chapter 5 provides guidance on basic and additional A/E services as part of the standard contract for A/E services.
- 102.6 Chapter 6 contains guidance for calculating and determining fees for A/E services.
- Chapter 7 contains applications of the Uniform Statewide Building Code which as DEB Standards are mandatory to apply to the design of building construction on state property, technical design criteria, and DEB policy affecting the design and construction of state facilities.
- 102.8 Chapter 8 establishes the format for the preparation of design documents and other professional studies by A/Es for Agencies of the Commonwealth. It also contains submittal requirements and approval milestones in the design stages of Capital Outlay projects.
- 102.9 Chapter 9 describes DEB design, operation, maintenance and procurement guidelines for use in developing plans and specifications for construction and renovation of state facilities and which must be followed unless a waiver in writing is granted by the Director of the Division of Engineering and Buildings.
- 102.10 Chapter 10 contains procedures for advertising projects, receiving and opening bids, awarding contracts, addressing informalities in bids, and handling bid protests. Chapter 10 also contains the procedures for construction administration, construction change orders, project completion, final inspection, facility occupancy and project close-out.
- **NOTE:** The following "Manual" chapters are not a part of the "A/E Manual" and are not a part of the A/E Contract.
- 102.11 Chapter 11 contains guidance for special procedures such as design build, construction management, prequalification of contractors and delegation of review.
- 102.12 Chapter 12 contains information on Building Official reviews, permits, certificates and approvals applicable to both Capital Outlay and Non-Capital Projects
- 102.13 Chapter 13 contains requirements for developing Master Plans and Master Site and Utility Plans.
- 102.14 Chapter 14 contains guidance and procedures for agency planning of Capital Outlay projects and the approval process.
- 102.15 Chapter 15 contains guidance and procedures for utilization requirements, completion and submittal of the various 'CO' forms applicable to construction for both Capital and Non-capital projects

- 102.16 Chapter 16 provides guidance for selecting the Building Committee and describes the duties to be performed by the Committee.
- 102.17 Chapter 17 contains requirements for reports to be submitted by the Agency to BCOM.

SECTION 103.0 CAPITAL OUTLAY vs. NON-CAPITAL OUTLAY PROJECTS

- 103.1 Capital Outlay Projects, as defined by the Department of Planning and Budget Instructions, must be authorized by the General Assembly or by the Governor as provided for in the Acts of Assembly §4-4.00 CAPITAL PROJECTS (also called the Appropriations Act). Capital Outlay Projects use an established authorization and approval sequence for the "Design Phase" of Project to include:
 - Project Initiation (using the CO-2 or HECO-2),
 - Schematic Design Approval Phase (using the CO-4 or HECO-4),
 - Preliminary Design Approval Phase (using the CO-5 or HECO-5) and
 - Working Drawing or Construction Documents Approval Phase (using the CO-6 or HECO-6).
 - After receiving Bids, Construction Contract Award approval is made using the CO-8 or HECO-8.

These forms are also used to track the cost of the project, the commitment of funds and the infusion or transfer of funds for the project. The approval authority for the forms is described in Chapter 14 of the Manual.

- 103.2 Non-Capital Outlay Projects, as defined by the Department of Planning and Budget Instructions, are usually small construction, renovation, repair or replacement projects which are funded by Agency resources and do not require authorized by the Legislature and the Governor. Non-Capital Outlay Projects in most cases do, however, involve work regulated by the Uniform Statewide Building Code and require a Building Permit from the Building Official or his designee. The design phases and approval process for the Non-Capital Outlay Projects is left to the agency's discretion depending on the project scope. However, the "construction documents" are required to be approved. The intended completion date and the Contractor's name or "work to be performed by agency forces" must be submitted along with the Application for Building Permit (CO-17A)
- 103.3 The Construction Phase is similar for both Capital Outlay and Non-Capital Outlay Projects (depending on the project scope) for Building Permits, Change Orders, Project Substantial Completion, and Certificate of Occupancy. The exception is usually that Capital Outlay Projects require submission of revised CO-2 and CO-8 forms for increases in the "Contingency" amount and for infusions and transfers of funds (See Chapter 14) while non-capital projects do not.

CONSTRUCTION & PROFESSIONAL SERVICES MANUAL – 2004

CHAPTER 1: INTRODUCTION

SECTION 104.0 DESIGN PHILOSOPHY

The design goal is to create a capital investment that meets the user's functional requirement and provides the most economical life cycle cost. The Commonwealth's design philosophy envisions a long and useful life for state buildings. These buildings will often be used for periods exceeding 50 years and, consequently, should be designed for durability, economy of operation and ease of maintenance. Further, §4-4.00 CAPITAL PROJECTS of the Appropriations Act states that "Projects shall be developed to meet Agency functional and space requirements within a cost range comparable to similar public and private sector projects." Note that this does not say the 'best' or 'most expensive' nor the 'cheapest'.

Building system components should be selected on the basis of life cycle costs. If an increased first or initial cost can be documented to show a reduced life cycle cost for the Commonwealth, particularly for operating and personnel costs, then the design should incorporate the more expensive first cost feature or system.

Agencies must ensure their architects and engineers exercise discipline in their designs to avoid inefficient use of space in terms of floor area and building volume. Exterior design features and materials should be consistent with the architectural character of the surrounding buildings and site. Excessive or grandiose features which are not related to the function or the intended use of the facility shall be avoided. Projects must be designed by the A/E to meet the functional and space requirements within the 'Design not to exceed' budget for the project.

Acceptance of a particular design does not imply that other, more cost-effective designs are not acceptable. A former Chairman of the AARB stated "Good architecture can be achieved simply by good design, which implies sensitivity to scale, massing, proportion, materials, detail and even color - none of which necessarily cost more."

SECTION 105.0 FORMS

"CO-"Forms are listed in Appendix C and CPSM Formats and Samples are included in the various Appendices to the **Manual**. Electronic copies of many of these forms, formats and samples are available for download at the DGS Forms Center (URL is http://forms.dgs.state.va.us or http://forms.dgs.virginia.gov). A link to the Forms Center is also provided on the BCOM webpage.

More specific instructions are on the form download page. Visit the DGS Forms Center often to download the latest version of "CO-" forms.

SECTION 106.0 INDEX

This Manual is posted on the BCOM Website, (URL is http://bcom.dgs.virginia.gov) in '.pdf' format and is fully text searchable. Therefore, no index is provided for the Manual.

NOTICE:

DGS e-mail addresses will be changing sometime within the next year. Notice of the change will be posted on the Website. The names / mailboxes will remain the same but the address will change from "dgs.state.va.us" to "dgs.virginia.gov"